

REMARKS

Claims 1-5 and 7-17 are all the claims presently pending in the application. Claims 1-2, 4-5, and 7-8 are amended to more clearly define the invention, claim 6 is canceled, and claims 9-17 are added. Claims 1 and 11 are independent.

These amendments are made only to more particularly point out the invention for the Examiner and not for narrowing the scope of the claims or for any reason related to a statutory requirement for patentability.

Applicant also notes that, notwithstanding any claim amendments herein or later during prosecution, Applicant's intent is to encompass equivalents of all claim elements.

Applicant gratefully acknowledges that claim 7 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, Applicant respectfully submits that all of the claims are allowable.

Claims 1-6 and 8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the Inoue reference.

This rejection is respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

An exemplary embodiment of the claimed invention, as defined by, for example, independent claim 1, is directed to an antenna having a dielectric substrate in which a plate thickness decreases from a central region to an annular region and a plurality of flat antenna patterns provided on the each of regions of the dielectric substrate. The plurality of flat antenna patterns each receives or transmits electric waves having different frequency bands, respectively.

Conventional antennas that are capable of operating under multiple bands do not have good characteristics. For example, multi-band antennas are conventionally provided with all of their antennas upon the same surface of a flat dielectric substrate. This conventional configuration results in the potential for radiation losses and an accompanying loss of efficiency.

In stark contrast, the present invention provides an antenna having a dielectric substrate in which a plate thickness decreases from a central region to an annular region. In this manner, excellent radio characteristics in each of multiple different frequency bands is provided. (Page 9, lines 3 - 11).

II. THE PRIOR ART REJECTION

The Examiner alleges that the Inoue reference teaches the claimed invention. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by the Inoue reference.

In particular, the Inoue reference clearly does not teach or suggest the features of the claimed invention including an antenna having a dielectric substrate in which a plate thickness decreases from a central region to an annular region as recited by independent claim 1. As explained above, this feature is important for providing excellent radio characteristics in each of multiple different frequency bands.

In stark contrast, the Inoue reference appears to disclose a composite antenna 1 with a circular dielectric substrate 10 that has a recess 12 at the center of the circular dielectric substrate 10. Therefore, the Inoue reference appears to disclose exactly the opposite from what is claimed by the present invention.

Therefore, the Inoue reference does not teach or suggest each and every element of the claimed invention and, therefore, the Examiner is respectfully requested to withdraw this rejection of claims 1-6 and 8.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that claims 1-5 and 7-17, all the claims presently pending in the Application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the Application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 8/24/05



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